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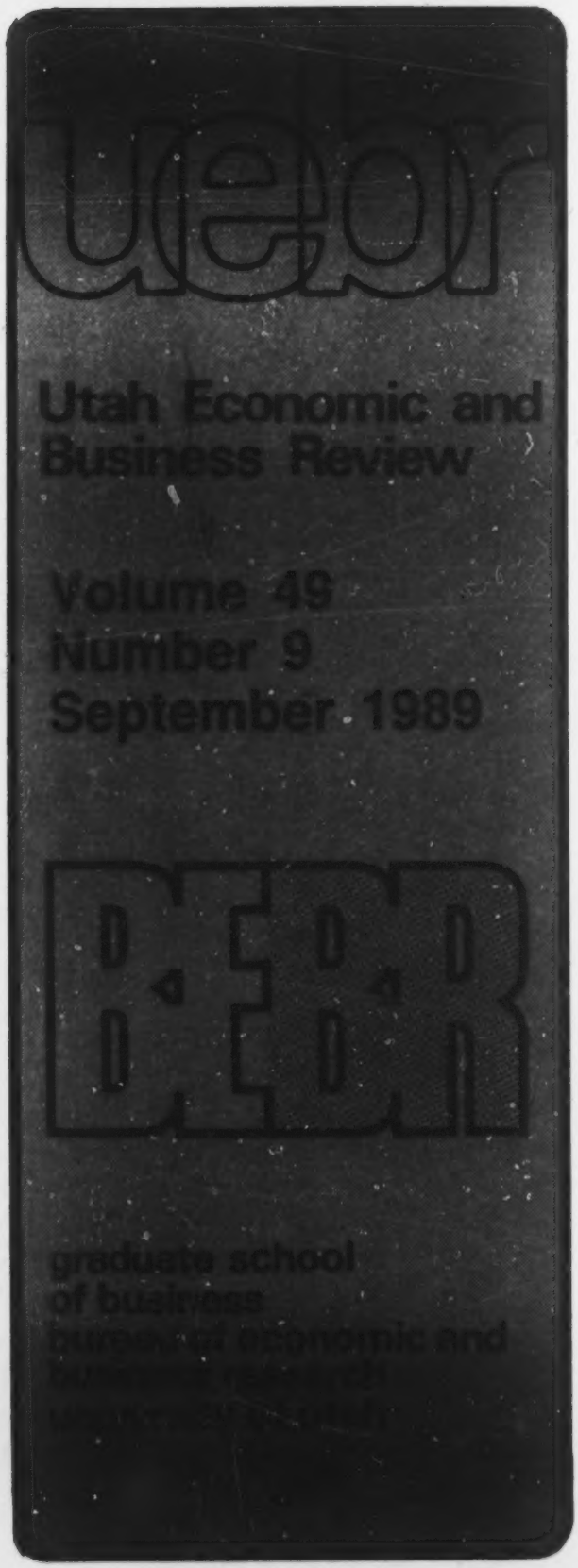

UTAH HOUSING FINANCE AGENCY: THE ECONOMIC IMPACT OF MORTGAGE PROGRAMS FOR NEW RESIDENTIAL UNITS

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A study of the economic impact of UHFA's mortgage programs was conducted by the Bureau of Economic and Business Research, for the Utah Housing Finance Agency.[1] The objective of the study was to measure the economic impact on the Utah economy of mortgage funds provided by the Utah Housing Finance Agency (UHFA) for new residential housing units. Since its creation in 1977 the UHFA has provided permanent financing for 2,629 new apartment units and 10,589 new single-family units; or 4.6 percent of new multifamily construction activity, and 9.8 percent of new single-family construction.

The employment, income and fiscal impacts of UHFA activities have been estimated using the Input-Output Model for Utah developed by the Bureau of Economic and Business Research.[2] An important requirement of the input-output analysis should be emphasized, i.e., employment, income and fiscal impacts are limited only to mortgage funds used in the construction of new residential units.

Note: It is assumed throughout this study that the UHFA mortgage programs provided financing for 13,218 units that otherwise would not have been financed or built, i.e., the construction of these units represents an infusion of income and jobs that occurred only because of the UHFA mortgage programs.

[1]This article is condensed from the study funded by a contract between the Utah Housing Finance Agency and the Bureau of Economic and Business Research, University of Utah, "The Economic Impact of Utah Housing Finance Agency's Mortgage Purchase Programs for New Residential Housing."

[2]The development of the input-output model by the Bureau of Economic and Business Research, University of Utah has relied heavily on a data base developed by Jack Faucett Associates for the U.S. Department of Health and Human Services entitled The Multiregional Input Accounts 1977: Introduction and Summary, July 1983.

Fifty-eight percent of UHFA's mortgage purchase funds have been used for construction of new residential units and 42 percent for the purchase existing residential units. Although financing the purchase of existing residential units does have some positive economic impact it is of less significance than the economic impact of the financing new residential units.

In 1987 and 1988 UHFA accounted for approximately 20 percent of the total single-family construction activity in the state, Table 1. In those two years the average price of a UHFA-financed new home was $64,800 and $65,225 respectively, well below the average sales price of a home in Salt Lake County of $79,000, Table 2. These data indicate the role the UHFA plays in "assuring an adequate source of capital for housing for low and moderate income persons".

Employment Impact

The significant economic and social impacts described in this report have been achieved through highly innovative tax-exempt bonding programs which are totally self-supporting and represent no financial cost to the Utah taxpayer nor present any legal liability to the State of Utah for the repayment of the bonds.

Table 1

Number of Loans for New Single Family Construction Funded by UHFA Mortgage Program

Year	Value (millions)	Number Loans	Percent of Total Single-family Construction
1977	$16.7	468	2.7
1978	27.7	779	5.0
1979	21.5	538	4.3
1980	79.4	1,657	21.4
1981	(a)	--	--
1982	28.6	518	10.9
1983	151.0	2,586	29.4
1984	66.9	1,107	14.8
1985	(a)	--	--
1986	31.3	492	5.8
1987	88.4	1,363	20.9
1988	66.7	1,023	19.3
1989	3.7	58	--
Total	$582.0	10,589	9.8

[a]No UHFA single family mortgage bonds issued.

Source: Utah Housing Finance Agency.

Table 2

A Comparison of Average New Home Prices of UHFA Programs, 1977-1989 (weighted average of UHFA homes)

Year	New UHFA Homes	Average Price UHFA	Average Price S.L. County	UHFA as Percent of S.L. County
1977	468	$35,593	$43,968	80.9
1978	779	35,593	51,762	68.8
1979	538	40,038	60,084	66.6
1980	1,657	47,928	68,073	70.4
1981	(a)	--	72,909	--
1982	518	55,174	76,445	72.2
1983	2,586	58,408	76,030	76.8
1984	1,107	60,428	78,200	77.3
1985	(a)	--	81,702	--
1986	492	63,625	80,112	79.4
1987	1,363	64,822	80,550	80.5
1988	1,023	65,224	79,602	81.9
1989	58	63,901	79,790	80.0
Total	10,589	--	--	--

[a]No single-family homes financed in 1981 and 1985 by UHFA.

Source: Bureau of Economic and Business Research, University of Utah; Salt Lake Real Estate Board; Utah Housing Finance Agency.

Single-family Housing

The employment impact of the UHFA's single-family housing program has been estimated for each mortgage purchase bond. Once the amount of mortgage funds for new residential construction was calculated, it was necessary to reduce this figure by the amount of land costs. Land cost is a major component of the price of a home but the purchase of land creates no jobs or income; hence, the amount of mortgage money allocated to land cost was subtracted from the mortgage funds provided by UHFA. For single-family housing, land cost was assumed to be 25 percent of the cost of the home; for multifamily housing, 15 percent. When land costs are subtracted, the remainder represents the amount

of mortgage funds used to buy "bricks and mortar" and pay wages and salaries.

The amount of mortgage money provided to homebuyers of new single-family homes is given in Table 3. This table also represents the employment impact, measured in total man-years (1,860) hours. The total man-year estimate includes the direct employment plus the indirect and induced employment created by the new construction activity. Direct employment consists of the number of construction workers required to actually build the new home. Indirect and induced employment consists primarily of jobs for those supplying construction inputs, i.e., the employment required to manufacture and supply paint, cement, lumber, glass, appliances and all other construction inputs beyond direct employment.

Table 3

Employment Impact of Mortgage Purchase Funds for New-Single Family Units, 1977-1987

Year	Net New Single Family Mortgage Funds[a] (millions)	Direct Employment (man-years)	Indirect and Induced (man-years)	Total Employment Impact (man-years)
1977	$12.53	158	197	355
1978	20.78	233	290	523
1979	16.16	160	200	360
1980	59.56	532	665	1,197
1981	(b)	--	--	--
1982	21.44	172	214	386
1983	113.28	885	1,105	1,990
1984	50.17	338	472	850
1985	(b)	--	--	--
1986	23.48	168	210	378
1987	66.27	464	580	1,044
1988	50.04	346	432	778
1989	2.28	19	24	43
Total	$436.47	3,513	4,392	7,905

[a]The value of land has no economic impact on the economy; therefore, the figures in this column reflect a 25 percent reduction of total mortgage purchase funds to adjust for the value of land in the UHFA's mortgage purchase program.

[b]No single-family mortgage bonds issued in these years.

Source: Bureau of Economic and Business Research, University of Utah.

The number of indirect and induced jobs created by new construction was derived by using the residential construction employment multiplier of 2.25. For example, direct employment of 100 construction workers creates a total of 225 jobs--derived from multiplying direct employment by the residential construction multiplier. The difference between the direct employment of 100 construction workers and the total employment of 225 employees is the indirect and induced employment impact of 125 employees.

Since 1977 UHFA has provided $582 million of mortgage funds for new single-family homes. Between 1977 and 1989 the construction of these homes created a total of 7,905 jobs (Table 3).

Multifamily Housing

Since the first multifamily issue in 1978 the agency has issued over $99 million of Multifamily Mortgage Purchase Bonds. These funds have been used to build approximately 2,600 rental units. The construction of these units has had a total employment impact of 1,764--784 in direct employment and 980 in indirect and induced employment (Table 4).

In summary, the UHFA has provided mortgage funds for over 13,200 new single-family and multifamily units in Utah. The construction activity required to build these new units has led to an additional 9,669 jobs for the Utah economy.

4,297	Direct Employment
5,372	Indirect and Induced Employment
9,669	Total Employment Impact

Methodology

The number of jobs created by UHFA mortgage funds was based on a relationship between employee hours and contract cost (mortgage funds provided by UHFA less estimated land cost). The Bureau of Labor Statistics, U.S. Department of Labor, calculated that in 1982 every $1,000 spent on construction creates 14.9 man-hours in employment for single-family construction and 17.4 man-hours of employment for multifamily housing.

The ratio of man-hours per construction cost changes every year depending on inflation and

productivity. An annual deflator was calculated using construction cost data from the Bureau of the Census. Productivity was held constant because recent research on productivity in the construction industry indicates declining productivity. Declining productivity would lead to an increase in the economic impact of UHFA programs, since under the assumption of declining productivity, it would take more man-hours to accomplish the same level of output. A constant productivity rate was also assumed since most of the study period includes the recession years of the 1980's when "inefficient firms and workers dropped out of the industry on the downswing,"[3] so that the decline in productivity was at least reduced if not halted.

Table 4
Employment Impact of Mortgage Purchase Funds for New Multifamily Units, 1977-1989

Year	Net Multifamily Mortgage Funds[a] (millions)	Direct Employ-ment (man-years)	Indirect and Induced (man-years)	Total Employment Impact (man-years)
1977	(b)	--	--	--
1978	$3.3	43	53	96
1979	9.4	108	135	243
1980	(b)	--	--	--
1981	(b)	--	--	--
1982	22.6	211	264	475
1983	9.6	87	109	196
1984	(b)	--	--	--
1985	39.3	335	419	754
1986	(b)	--	--	--
1987	(b)	--	--	--
1988	(b)	--	--	--
1989	(b)	--	--	--
Total	$84.2	784	980	1,764

[a]The value of land has no economic impact on the economy; therefore, the figures in this column reflect a 15 percent reduction of total mortgage purchase funds to adjust for the value of land in the UHFA's mortgage purchase program.

[b]No multifamily mortgage purchase bonds were issued in these years.

Source: Bureau of Economic and Business Research, University of Utah.

[3]Cremeans, J.E., "Productivity in the Construction Industry", Construction Review, May-June 1981, pg. 6, Department of Commerce, Bureau of Economic Analysis.

The construction cost index and man-hours/ $1,000 of construction for deriving economic impact appear in Table 5.

Table 5
Construction Cost Index and Man-Hours/ $1,000 of Construction, 1977-1989

Year	Cost Index	Man-hours/ $1,000 Single-Family	Man-hours/ $1,000 Multifamily
1977	63.6	23.4 hrs	27.3 hrs.
1978	71.5	20.8	24.3
1979	80.9	18.4	21.5
1980	89.7	16.6	19.4
1981	97.1	15.3	17.9
1982	100.0	14.9	17.4
1983	102.6	14.5	16.9
1984	106.4	14.0	16.4
1985	109.5	13.6	15.8
1986	111.8	13.3	15.6
1987	114.3	13.0	15.2
1988	116.0	12.8	15.0
1989	116.6	12.8	14.9

Source: Bureau of Economic and Business Research, University of Utah.

Income Impact

Mortgage funds provided by the UHFA not only create new jobs but also generate additional wage and salary payments for the Utah economy. The income impacts are divided into two categories: (1) direct income (wages and salaries paid to contractors, laborers, etc.) and (2) indirect and induced income (primarily wage and salary payments to suppliers of products and services for the residential construction sector). The income impacts have been calculated for each Mortgage Purchase Bond.

The methodology described below was applied to each bond issue to determine the total income impact. For example, in 1977 the UHFA Single Family Mortgage Purchase Bond provided $16.7 million for new single-family homes. Part of the purchase price of each new home is land cost. Land requires no income payments of any kind but its cost represents approximately 25 percent of the price of a single-family home and 15 percent for multifamily housing. Therefore, $4.17 million of the $16.7

million used in the 1977 issue was allocated to land costs, leaving $12.5 million in mortgage funds as the income impact.

The portion of this $12.5 million that ends up as wages or salaries, i.e., direct income, was determined by using the income coefficient of .306. By applying this coefficient to the $12.5 million, the direct income to the construction sector from the 1977 issue was $3.83 million. Once direct income was calculated, it was then possible to estimate the total income impact by using the income multiplier of 1.95 for residential construction, as follows: $3.83 million x 1.95 = $7.47 million in total income impact.

Therefore, the total income impact of the 1977 issue is comprised of:

$3.83 million Direct Income
$3.63 million Indirect and Induced Income
$7.47 million Total Income Impact

The annual income impacts for single-family and multifamily activities are given in Tables 6 and 7, page 8. Since 1977 the UHFA has provided mortgage funds for 13,218 new single-family and multifamily units in Utah and the construction activity required to build the new units has resulted in an additional $302.8 million of income for the state economy.

$155.4 million Direct Income
$147.4 million Indirect and Induced Income
$302.8 million Total Income Impact

Fiscal Impact

The UHFA's mortgage programs have financed 13,218 new residential units in addition to 11,416 existing residential units since 1977. The new construction activity required to build these units has added an additional $302.8 million in income to the Utah economy, which in turn has led to an increase in tax revenues for the state and local communities. Using the Utah Input-Output Table plus personal income and tax revenue data, the annual fiscal impacts of UHFA programs have been estimated. In the past ten years the wages and salaries generated by the UHFA program have resulted in an increase in tax revenues of $35.7 million—$32.1 million in state tax revenues and $3.6 million in local revenues (Table 8).

Table 8
The Fiscal Impacts of UHFA Mortgage Programs
(new construction only)

Type of Tax	Tax Revenue
Sales Tax	$11,809,000
Individual Income Tax	10,295,000
Other State Tax	9,992,000
Local Sales Tax	3,571,000
One-Time Fiscal Impact	35,667,000
Annual Property Tax Revenues (1989)	6,344,800
Est. Average Value of Home	60,150
Est. Average Value of Apartment	20,000

Source: Computed by Bureau of Economic and Business Research, University of Utah.

In addition to income tax revenues, local property tax revenues have also increased as a result of UHFA programs. The average value in 1989 of the 10,589 new home construction figures financed by UHFA mortgage programs is $60,150, weighted and adjusted for inflation. The average value of a new multifamily unit is estimated at $20,000. At these values and given the average state-wide property tax for a primary resident and multifamily unit, the residential construction financed by UHFA generates $6.3 million annually in local property taxes; $5.7 million for single-family homes and $644,800 for multifamily units, Table 8.

Summary

A summary table outlines the economic impact of the programs and activities of the Utah Housing Finance Agency.

Summary of Economic Impact
1977-1989

	Funds (millions)	Units	Income Impact (millions)	Employment Impact
Single-family	$582	10,589	$260.4	7,900
Multifamily	$ 99	2,629	$ 42.4	1,770
Total	$681	13,218	$302.8	9,670

Fiscal Impact

Income Tax	$10.3 million
Sales Tax	$11.8 million
Other Taxes	$ 9.9 million
Other Local Taxes	$ 3.5 million
Local Property Tax (Annual)	$ 6.3 million annually

Utah Business Statistics

UTAH DATA	Jun. 1988	Jun. 1989	% Change from Year Ago	12-Month Average This Year	12-Month Average Last Year	12-Month Average % Change
Total Personal Income (seasonally adjusted) (mil. of dol.) (qtly.)	20,389	22,068	8.2%	21,443	19,877	7.9%
New Corporations (no.)	462	466	0.9%	451	472	-4.4%
New Car, Truck, and Motor Home Sales (no.)	5,310	5,233	-1.5%	5,101	5,251	-2.9%
Agriculture						
Average Prices Recorded by Farmers (dol.)						
Beef Steers and Heifers (cwt) (thous.)	67.30	70.00	4.0%	70.37	66.05	6.5%
Lambs (cwt)	58.10	65.50	12.7%	60.99	69.52	-12.3%
Milk Wholesale (cwt)	10.50	11.40	8.6%	11.90	11.67	2.0%
Alfalfa Hay, Baled (per ton)	75.00	79.00	5.3%	80.42	72.00	11.7%
Cattle Slaughtered (live weight) (thous. of lbs.)	46,514	50,642	8.9%	47,365	45,143	4.9%
Construction						
Total Construction (thous. of dol.) 1	94,550.2	83,104.2	-12.1%	67,669.8	NA	NA
Residential	46,810.2	42,998.9	-8.1%	33,411.4	NA	NA
Nonresidential	31,824.2	26,823.2	-15.7%	21,562.7	NA	NA
Additions, Alterations, and Conversions	15,915.8	13,282.2	-16.5%	12,695.8	NA	NA
Total Permit Construction (thous. of dol.) 2	103,675.8	105,034.9	1.3%	73,927.0	79,186.1	-6.6%
Residential	50,129.0	43,304.9	-13.6%	34,617.4	35,634.7	-2.9%
Nonresidential	36,071.1	43,498.5	20.6%	25,413.4	29,559.8	-14.0%
Additions, Alterations, and Repairs	17,475.1	18,231.5	4.3%	13,896.1	13,991.6	-0.7%
New Dwelling Units (no.)	712	547	-23.2%	456	498	-8.4%
Employment						
Civilian Labor Force (thous.)	760.2	783.0	3.0%	765.4	751.2	1.9%
Total Employed Persons	724.4	748.5	3.3%	731.1	709.9	3.0%
Unemployed Persons	35.8	34.5	-3.6%	34.3	41.4	-17.1%
Percent Total Labor Force	4.7	4.4	-6.4%	4.5	5.5	-18.8%
Employees on Nonagricultural Payrolls (thous. of jobs)	664.4	690.7	4.0%	671.5	648.1	3.6%
Manufacturing	99.6	103.2	3.6%	100.3	95.7	4.9%
Mining	8.5	7.7	-9.4%	7.9	8.3	-4.1%
Contract Construction	26.8	27.2	1.5%	24.9	25.2	-1.5%
Transportation, Communication, and Utilities	39.6	40.4	2.0%	39.9	38.4	4.0%
Wholesale Trade	35.4	37.9	7.1%	36.0	34.9	3.1%
Retail Trade	120.1	126.9	5.7%	123.1	118.6	3.7%
Finance, Insurance, and Real Estate	33.4	33.3	-0.3%	33.3	33.6	-1.0%
Services 3	156.1	166.8	6.9%	162.0	151.5	6.9%
Federal Government	39.8	40.1	0.8%	39.7	39.4	0.7%
State Government 4	38.4	39.7	3.4%	38.9	38.2	2.1%
Local Government 4	66.7	67.5	1.2%	65.5	64.4	1.8%
Average Weekly Hours						
Manufacturing	40.0	39.6	-1.0%	40.2	40.1	0.2%
Mining	41.8	41.3	-1.2%	40.8	42.5	-4.1%
Wholesale Trade	38.3	35.1	-8.4%	36.3	38.3	-5.1%
Retail Trade	28.5	27.5	-3.5%	27.6	28.2	-2.0%
Amount of Unemployment Compensation (thous. of dol.)	5,218.5	4,118.9	-21.1%	5,295.0	6,454.8	-18.0%
Finance						
Savings, Savings and Loan Association (mil. of dol.)	2,441.0	2,197.9	-10.0%	2,309.0	2,371.4	-2.6%
Tax Collections by the State of Utah (thous. of dol.)						
Total Tax Collections	182,556.5	167,585.7	-8.2%	147,806.5	149,107.3	-0.9%
Sales and Use Tax	68,245.8	71,666.5	5.0%	55,588.4	51,101.6	8.8%
Motor Fuel Tax	20,998.8	19,463.2	-7.3%	10,860.3	10,780.8	0.7%
Individual Income Tax	47,867.9	27,903.4	-41.7%	50,656.5	53,272.7	-4.9%
Corporation Franchise Tax	10,309.4	12,619.9	22.4%	7,331.5	5,846.0	25.4%
Production						
Crude Oil to Refineries (thous. of bbls.)	4,425.0	NA	NA	NA	3,926.2	NA
Crude Oil (thous. of bbls.)	2,739.6	2,052.5	-25.1%	2,505.3	2,894.8	-13.5%
Natural Gas (mil. of cu. ft.)	22,572.9	16,460.1	-27.1%	22,503.7	23,177.9	-2.9%
Coal (thous. short tons)	1,470.0	1,362.0	-7.3%	1,466.8	1,521.8	-3.6%
Tourism/Travel						
Air Passengers (total no. on and off)(S.L. Int'l Airport)	948,592	1,111,024	17.1%	918,624	917,382	0.1%
Highway Traffic Count Across State Lines	NA	40,741	NA	NA	NA	NA
Transient Room Taxes (thous. of dol.)	709.5	1,054.5	48.6%	575.2	532.0	8.1%
Visits, State, Nat'l. Parks, Monuments (thous.)	1,966.3	1,920.0	-2.4%	1,107.3	1,067.2	3.8%
Utilities						
Telephone Lines in Service (Mt. Bell)(Residential)	485,999	497,447	2.4%	493,952	484,174	2.0%
Telephone Lines in Service (Mt. Bell)(Nonresidential)	180,630	186,818	3.4%	183,830	178,340	3.1%
Electric Customers (Residential)	474,216	485,084	2.3%	480,474	475,742	1.0%
Electric Customers (Commercial)	46,672	47,611	2.0%	47,458	46,414	2.2%
Natural Gas Customers (Residential & Commercial)	456,898	471,678	3.2%	465,461	452,742	2.8%
Natural Gas Customers (Industrial)	544	570	4.8%	558	548	1.8%

Utah Business Statistics

UTAH DATA	Jun. 1988	Jun. 1989	% Change from Year Ago	12-Month Average This Year	12-Month Average Last Year	12-Month Average % Change
Davis County						
Non-Ag. Employment (thous.)	53.8r	55.9f	3.9%	53.4	52.0	2.7%
Unemployment Rate	4.5r	4.2	-6.7%	3.9	5.0	-21.1%
Auth. Permit Construction (thous. of dol.)	12,139.4	23,074.8	90.1%	9,205.5	10,052.5	-8.4%
New Dwelling Units (no.)	94	78	-17.0%	63	75	-15.8%
Postal Receipts (thous. of dol.)	315.8	530.0	67.8%	516.2	373.1	38.4%
Electric Customers (Residential)	47,858	48,416	1.2%	48,499	47,792	1.5%
Electric Customers (Commercial)	3,441	3,519	2.3%	3,572	3,344	6.8%
Natural Gas Customers (Residential)	50,609	51,742	2.2%	51,131	49,583	3.1%
Natural Gas Customers (Industrial)	52	56	7.7%	54	52	4.5%
Telephone Lines in Service (Mt. Bell)(Residential)	55,232	56,859	2.9%	56,094	54,981	2.0%
Telephone Lines in Service (Mt. Bell)(Nonresidential)	11,358	11,958	5.3%	11,663	10,928	6.7%
Salt Lake County						
Non-Ag. Employment (thous.)	343.3r	357.6f	4.2%	346.0	335.9	3.0%
Unemployment Rate	4.5r	4.2	-6.7%	4.0	5.1	-21.4%
Auth. Permit Construction (thous. of dol.)	40,128.6	33,780.4	-15.8%	31,313.2	36,027.0	-13.1%
New Dwelling Units (no.)	259	181	-30.1%	171	180	-4.7%
Postal Receipts (thous. of dol.)	7,583.0	7,592.0	0.1%	8,302.1	7,620.7	8.9%
Electric Customers (Residential)	238,353	244,209	2.5%	241,736	238,106	1.5%
Electric Customers (Commercial)	20,357	20,721	1.8%	20,672	20,196	2.4%
Natural Gas Customers (Residential)	220,007	224,162	1.9%	222,573	218,805	1.7%
Natural Gas Customers (Industrial)	235	245	4.3%	240	235	2.0%
Telephone Lines in Service (Mt. Bell)(Residential)	229,612	234,287	2.0%	232,440	228,559	1.7%
Telephone Lines in Service (Mt. Bell)(Nonresidential)	111,113	113,044	1.7%	111,912	110,370	1.4%
Utah County						
Non-Ag. Employment (thous.)	80.1r	83.7f	4.5%	81.4	77.5	5.1%
Unemployment Rate	4.4r	4.5	2.3%	3.7	5.4	-30.9%
Auth. Permit Construction (thous. of dol.)	19,406.8	19,792.8	2.0%	11,903.4	11,169.8	6.6%
New Dwelling Units (no.)	110	105	-4.5%	69	69	-0.1%
Postal Receipts (thous. of dol.)	1,150.3	1,319.5	14.7%	1,326.9	1,010.1	31.4%
Electric Customers (Residential)	52,168	53,728	3.0%	52,846	52,865	0.0%
Electric Customers (Commercial)	5,981	5,918	-1.1%	5,990	6,025	-0.6%
Natural Gas Customers (Residential)	61,092	62,874	2.9%	62,430	60,993	2.4%
Natural Gas Customers (Industrial)	65	73	12.3%	71	68	4.5%
Telephone Lines in Service (Mt. Bell)(Residential)	63,645	65,481	2.9%	65,573	63,629	3.1%
Telephone Lines in Service (Mt. Bell)(Nonresidential)	19,690	21,598	9.7%	20,929	19,418	7.8%
Weber County						
Non-Ag. Employment (thous.)	62.5r	64.8f	3.7%	62.7	60.9	3.1%
Unemployment Rate	5.8r	5.3	-8.6%	4.9	6.6	-25.1%
Auth. Permit Construction (thous. of dol.)	10,053.3	7,746.4	-23.0%	5,147.3	7,468.7	-31.1%
New Dwelling Units (no.)	69	44	-36.2%	44	58	-24.6%
Postal Receipts (thous. of dol.)	591.3	596.2	0.8%	684.8	629.5	8.8%
Electric Customers (Residential)	53,337	54,063	1.4%	53,906	53,220	1.3%
Electric Customers (Commercial)	4,932	4,970	0.8%	4,978	4,897	1.7%
Natural Gas Customers (Residential)	49,698	50,440	1.5%	50,218	49,335	1.8%
Natural Gas Customers (Industrial)	82	86	4.9%	84	84	-0.3%
Telephone Lines in Service (Mt. Bell)(Residential)	46,476	47,345	1.9%	46,940	46,161	1.7%
Telephone Lines in Service (Mt. Bell)(Nonresidential)	11,970	12,288	2.7%	12,132	11,438	6.1%

1 Obtained from U.S. Bureau of the Census Construction Statistics Division.
2 Obtained from *Utah Construction Report*.
3 Includes services by nonprofit and religious organizations.
4 Includes public schools and college institutions.

NA Not Available
r Revised
f Forecast

Sources:

Personal Income	U.S. Department of Commerce, Bureau of Economic Analysis.
New Corporations	Utah Secretary of State.
New Car and Truck Sales	Utah State Tax Commission, Economic and Statistical Unit.
Agriculture	U.S. Department of Agriculture, Utah Agricultural Statistics Service, *Utah Agriculture*.
Construction Data	U.S. Bureau of the Census and Bureau of Economic and Business Research, *Utah Construction Report*.
Employment Data	Utah Department of Employment Security.
Savings Information	Utah Savings and Loan Institutions.
Tax Collections	Utah State Tax Commission.
Crude Oil Production	Utah Department of Oil, Gas, and Mining and Area Oil Refineries.
Natural Gas Production	Utah Department of Oil, Gas, and Mining.
Coal Production	U.S. Department of Energy.
Air Passengers	Salt Lake City International Airport, Statistics Division.
Highway Traffic Count	Utah Department of Transportation.
Visits to State and National Parks and Monuments	U.S. Forest Service, Utah State Parks and Recreation Department.
Utilities Data	Cooperating Utah Utility Companies.
Postal Receipts	Postmasters in Davis, Salt Lake, Utah, and Weber Counties.

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Table 6

Income Impact of New Single-family Mortgage Program, 1977-1989 (millions)

Year	New Construction Loans	Direct Income Impact	Indirect, Induced Income Impact	Total Income Impact
1977/78	$44.4	$10.2	$9.7	$19.9
1979	21.5	4.9	4.6	9.5
1980	79.4	18.2	17.3	35.5
1981	(a)	(a)	(a)	(a)
1982	28.6	6.6	6.2	12.7
1983	151.0	34.6	32.9	67.5
1984	66.9	15.3	14.5	29.8
1985	(a)	(a)	(a)	(a)
1986	31.3	7.1	6.8	14.0
1987	88.4	20.2	19.3	39.5
1988	66.7	15.3	14.6	29.9
1989	3.7	0.9	0.8	1.7
Total	$582.0	$133.6	$126.8	$260.4

[a]No single-family mortgage bonds issued in these years.

Source: Bureau of Economic and Business Research, University of Utah.

Table 7

Income Impact of New Multifamily Mortgage Program, 1978-1989 (millions)

Year	New Construction Loans	Direct Income Impact	Indirect, Induced Income Impact	Total Income Impact
1978	$3.3	$0.8	$0.8	$1.6
1979	9.4	2.4	2.3	4.7
1980	(a)	--	--	--
1981	(a)	--	--	--
1982	22.6	5.9	5.5	11.4
1983	9.6	2.5	2.3	4.8
1984	(a)	--	--	--
1985	39.3	10.2	9.7	19.9
1986	(a)	--	--	--
1987	(a)	--	--	--
1988	(a)	--	--	--
1989	(a)	--	--	--
Total	$84.2	$21.8	$20.6	$42.4

[a]No multifamily mortgage bonds were issued in these years.

Source: Bureau of Economic and Business Research, University of Utah.

Chase N. Peterson, *President, University of Utah*
John Seybolt, *Dean, Graduate School of Business*

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